

THE ANNALS of MATHEMATICAL STATISTICS

FOUNDED AND EDITED BY H. C. CARVER, 1930-1938
EDITED BY S. S. WILKS, 1938-1949

THE OFFICIAL JOURNAL OF THE INSTITUTE
OF MATHEMATICAL STATISTICS

Contents

	PAGE
Asymptotic normality of simple linear rank statistics under alternatives JAROSLAV HÁJEK	325
Some results on multitype continuous time Markov branching processes KRISHNA BALASUNDARAM ATHREYA	347
A random time change relating semi-Markov and Markov processes..	JAMES YACKEL 358
A remark on hitting places for transient stable process.....	SIDNEY C. PORT 365
Transforms of stochastic processes.....	P. WARWICK MILLAR 372
Substitution in conditional expectation.....	R. R. BAHADUR AND P. J. BICKEL 377
On convergence in r -mean of normalized partial sums RONALD PYKE AND DAVID ROOT	379
The invariance principle for a lattice of random variables.....	J. KUELBS 382
A simpler proof of Smith's roulette theorem.....	LESTER E. DUBINS 390
A characterization of certain sequences of norming constants STEPHEN R. KIMBLETON	394
The probability that the sample distribution function lies between two parallel straight lines.....	J. DURBIN 398
Non-discounted denumerable Markovian decision models.....	SHELDON ROSS 412
On recurrent denumerable decision processes.....	LLOYD FISHER 424
Characterizations of independence in certain families of bivariate and multivariate dis- tributions.....	KUMAR JOGDEO 433
Asymptotically optimal Bayes and minimax procedures in sequential estimation PETER J. BICKEL AND JOSEPH A. YAHAV	442
On the choice of design in stochastic approximation methods.....	VÁCLAV FABIAN 457
Concentration of random quotients.....	WILLIAM H. LAWTON 466
On the numerical representation of qualitative condition probability R. DUNCAN LUCE	481
Minimax estimation of a random probability whose first N moments are known MORRIS SKIBINSKY	492
Estimation of the larger translation parameter SAUL BLUMENTHAL AND ARTHUR COHEN	502
Estimation of two ordered translation parameters SAUL BLUMENTHAL AND ARTHUR COHEN	517
A comparison of the most stringent and the most stringent somewhere most powerful test for certain problems with restricted alternative.....	W. SCHAAFBSMA 531
Likelihood ratio tests for restricted families of probability distributions RICHARD E. BARLOW	547

Continued on back cover

Vol. 39, No. 2—April 1968